Feb. 20, 2020

longitudinal axis of the spindle. The movement of the spindle is blocked or blocked before the spindle is cut to length. When cutting the spindle, the spindle is cut to a desired length, in particular depending on the mounting depth of the diverter valve. The cutting can be carried out with the help of a cutting template, which is mounted on the spindle and brought into a defined position relative to the wall. The cutting template can be pushed, for example, up to a support plate of the concealed installation body, which rests on the wall. By means of the cutting template, the spindle and optionally other components of the diverter valve can be cut to length in a sectional plane, which is at a predetermined distance from the wall. The cutting can be done by a fitter using a saw. By cutting the spindle to length, a movement of the spindle is automatically released. This is done by releasing, severing and/or cutting through a blocking element or locking element when cutting the spindle. In particular, the blocking element or locking element is formed such that when the spindle is cut, it is automatically released, severed and/or cut through along with the spindle. By releasing the spindle after cutting to length, the latter is displaced by its bias from the diverter valve housing by a defined travel. The travel corresponds in particular to the play that the valve body has between the first valve seat and the second valve seat. This results in that prior to mounting of further components on the spindle, such as a control knob, the spindle always protrudes by the same length from the wall, independent of the mounting depth of the diverter valve. In this way, a uniform outer appearance and accurate mounting of further components on the spindle can be ensured.

[0010] The spindle may be biased by an elastic element. The elastic element may be, for example, a spring, in particular in the manner of a coil spring or leaf spring. The elastic element contacts the spindle in particular at a longitudinal end of the spindle or a circumferential collar on the spindle. The elastic element may be supported on the diverter valve housing or on a component of the concealed installation body. Furthermore, the elastic element in particular generates an actuating force acting in a longitudinal direction, i.e., in parallel with the longitudinal axis of the spindle.

[0011] The valve body can be displaceable by the elastic element against a first valve seat. This may mean that the actuating force generated by the elastic element presses the spindle in the direction of the first valve seat.

[0012] The valve body may be displaceable against a second valve seat counter to an actuating force of the elastic element. This can be done, for example, by the user pressing on the spindle or a control knob of the spindle or by a fluid pressure in the diverter valve inlet chamber.

[0013] The spindle may be biased against a stop before cutting. The stop is a blocking element or locking element against which the spindle is pressed by the elastic element prior to cutting to length. In addition, the stop may be formed in the manner of a stopper plug.

[0014] The stop may be fastened to the diverter valve housing or to a guide sleeve of the spindle. The stop can be directly or indirectly fastened to the diverter valve housing or to the guide sleeve. The guide sleeve may be tubular and/or at least partially surround the spindle. In particular, the guide sleeve can be mounted concentrically on a spindle and/or on the diverter valve housing or be screwed into the diverter valve housing. The guide sleeve is used in particular

to guide the spindle or a control knob of the spindle. Moreover, the guide sleeve may be cut to length in tandem with the spindle, in particular in the same cutting plane. The cutting of the spindle and the guide sleeve is thus carried out in particular in a single cutting step.

[0015] The stop may be removable by cutting the spindle to length. This means, as already mentioned, that when cutting the spindle, the stop is automatically also released, severed and/or cut through.

[0016] In accordance with another aspect, a concealed installation body for a sanitary fixture is also proposed, comprising for example: a housing; and a diverter valve according to the invention, which is at least partially disposed in the housing.

[0017] The concealed installation body is used in particular for sanitary fittings that are used in connection with showers and/or bathtubs. The sanitary fittings can in particular be water inlets, hand-held shower heads, overhead shower heads, nozzles and/or the like. Such concealed installation body are generally mounted within a wall opening, a cavity in a wall or another type of support and serve to accommodate a functional unit.

[0018] The concealed installation body may comprise a mixer, disposed at least partially in particular in a housing of the concealed installation body, and formed for example in the manner of a manual mixer or thermostat cartridge. The mixer can be a part of the functional unit. The housing may be at least partially made of plastic and/or metal. Furthermore, the housing can be at least partially tubular and may form at least one receiving space, for example for the functional unit. By means of the mixer, in particular a cold water and a hot water are miscible to a mixed water, having a desired mixed water temperature. The cold water can have a cold water temperature, which is in particular a maximum of 25° C. (Celsius), preferably 1° C. to 25° C., more preferably 5° C. to 20° C. The hot water may have a hot water temperature, which is in particular a maximum of 90° C., preferably 25° C. to 90° C., particularly preferably 55° C. to 65° C. By means of the mixer, e.g. with at least one mixed water line in the functional unit, the mixed water can be supplied to a diverter valve, by means of which the mixed water is supplied to a desired discharge point or sanitary fitting. For further details of the concealed installation body and the diverter valve, reference is made to the description of the diverter valve according to the invention.

[0019] In accordance with yet another aspect of the invention, also proposed is a method of mounting a concealed installation body according to the invention, comprising for example: fixing the concealed installation body at least partially in a wall or on a support; and cutting to length a spindle of a diverter valve of the concealed installation body.

[0020] By cutting the spindle to length, the spindle is automatically released, so that after cutting to length, the spindle is displaced from the diverter valve housing by a defined travel. The cutting of the spindle takes place at a desired distance from the wall or the support in order to ensure a uniform appearance. More details can be found in the description of the diverter valve according to the invention and the inventive concealed installation body.

[0021] For cutting the spindle to length, a cutting template can be mounted on the spindle. On an outer peripheral surface, the cutting template may have an in particular circumferential groove, which defines the cutting plane, for example, for a saw.